



DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES
Minerals & Mining Program - Oil & Gas Section
2050 West Main, Suite #1, Rapid City, SD 57702-2493
Telephone: 605-394-2229, FAX: 605-394-5317

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FORM 2

OCT 21 2009

DEPT OF ENVIRONMENT & NATURAL
RESOURCES - RAPID CITY

State of South Dakota
Department of Environment
and Natural Resources

APPLICATION FOR PERMIT TO DRILL

Type of Work:

☒ Drill New Well ☐ Reenter Well ☐ Drill Directional Well

Type of Well:

☒ Oil Well ☐ Gas Well ☐ Injection
☐ Other

Name and Address of Operator

LUFF EXPLORATION COMPANY, 1580 LINCOLN STREET, SUITE 850, DENVER, CO 80203

Telephone

(303) 861-2468

Name and Address of Surface Owner

Leroy Abrahamson, 10004 147th St. SW, Bowman, ND 58623

Name and Address of Drilling Contractor and Rig Number:

TBD

Surface Location of Well: Qtr-Qtr, Sec, Twp, Rge, County, Feet from Nearest Lines of section, and latitude and longitude (if available):

SESW Sec. 21-T23N-R6E, Harding County, 935' FSL x 1500' FWL; Lat = 45° 56' 17.91", Long = 103 23' 28.62"

If Directional, top of pay and bottom hole location from nearest lines of section:

East Lateral : Top est @ 9,273' MD = 9,000' TVD; BHL: 185' FSL 2,149' FWL, Sec.22-T23N-R6E

Acres in Spacing (Drilling) Unit

Total Unitized area: approx. ± 4836 acres

Description of Spacing Unit

Pete's Creek Red River Unit

Well Name and Number		Elevation	Field and Pool, or Wildcat		Proposed Depth and Formation
PCRRU N-21H		2889.6' ungraded	Pete's Creek Red River Unit Red River B		Lat: 9,000' TVD; 14,787' MD; RR
Size of Hole	Size of Casing	Weight per Foot	Depth	Cementing Program (amount, type, additives)	Depth
1) 13-1/2"	9-5/8"	36#	2,000'	440 sks Lite Tailed w/ 200 sks "G"	Surface
2) 8-3/4"	7"	23#, 26# & 29#	9,273'	1st Stage = 440 sks "G"	6,500'
3)				2nd Stage = 165 sks Lite Tailed w/ 220 sks "G"	4,200'
4)					

Describe Proposed Operations (Clearly State all Pertinent Details, and Give Pertinent Dates, Including Estimated Date of Starting any Proposed Work).
Use Additional Page(s) if appropriate.

Drill a medium radius horizontal well in the Red River 'B' formation. Drill 13-1/2" surface hole to 2,000' with fresh water. Run 9-5/8" casing and cement to surface. Drill 8-3/4" vertical hole to KOP at approx. 8,523'. Drill build section with an azimuth of approx. 93 deg. and land in the top of the "B" zone at 9,273' MD = 9,000' TVD with a BHL 22' south and 477' east of surface location. Vertical and build sections to be drilled with invert oil mud. Run 7" casing and cement to 4,200'. Drill one 6-1/8" horizontal lateral in the "B" zone to approx 14,787' MD = 9,000' TVD at BHL approx. 195' FSL and 2,149' FWL Sec. 22-T23N-R6E. Fresh water/polymer will be used for the horizontal section. All drilling fluids and cuttings will be contained in a pit lined with a 12 mil plastic. All liquids will be disposed of in an approved method, the liner and cuttings will be buried in place. The estimated start date for location construction is 11/ 1/09. Estimated start date for drilling is 2/26/10.

I hereby certify that the foregoing as to any work or operation performed is a true and correct report of such work or operation.

Signature

David A. Norby

Name (Print)

Operations Manager

Title

Date

10/19/09

FOR OFFICE USE ONLY

Approved by:

Title: Oil and Gas Supervisor

Permit No. 1957

API No. 40 063 20696

Date Issued: November 9, 2009

Conditions, if any, on attached page.